

# **Abstract**

## **Titles**

Effect of maximum heart rate on accuracy of fire

## **Objectives**

The goal of this work will be to examine the influence of maximum heart rate on accuracy of fire from the personal defensive gun (pistol), whereas a reference will be used the deviation in accuracy of fire. The group of respondents consists of members of the Police of the Czech republic.

## **Methods**

It is the empirical work of observational character. To establish statistical significance we used independent samples, paired T – test. For statistical evaluations of the results we used methods of comparison and comparison of averages. To evaluate the shooting targets we used numerical method of detecting the mean point of impact. To establish the maximum heart rate we used sporttester.

## **Results**

From the measured data was drawn this conclusion. The maximum heart rate has statistically significant effect on accuracy of fire. The accuracy of fire is expressed by average distances of single points of impact from the central point of impact. We found out that the performed activity could have had the impact on the size of the differences before and after the activity.

## **Keywords**

shooting, physical stress, resting heart rate, maximum heart rate